Lessons from the field: Understanding farmer behavior and options to improve outcomes

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• World Agroforestry (ICRAF) is a centre of science and development excellence that harnesses the benefits of trees for people and the environment.

• CGIAR is a global research partnership for a food secure future dedicated to reducing poverty, enhancing food and nutrition security, and improving natural resources.
Background

• Low adoption rates of technically effective agricultural innovations
• Long pay-off periods especially for trees and NRM
• Intangible or non-monetary benefits
• Complex farming systems require substantial knowledge and changes to practices
• Unlikely one fits all strategy

• Tendency to trial new ways of operation first
• Multiple income streams and small-scale farming operations (on- and off-farm)
Citizen Science - Uganda

• The problem
  • Low milk yields in the dairy sector
  • Feed supplements unaffordable

• Our approach
  • Fodder Shrubs integrated into the farming system (potential erosion control)
  • Supported trialing within the community (monitoring approach, Calliandra provided)
  • Self-monitored and compared to status quo (paired farmers)

• Early insights
  • Directly visible improvements rather than waiting for shrubs to mature
  • Milk yields up from 4 to 9L per day
  • Increased adoption in the community (now 75%)
S4C – Kenya + Malawi

• The problem
  • Low milk yields
  • Milk supply gap in Kenya and Malawi
  • Nutrition implications
  • Scaling the Uganda experience successful yet expensive
  • Goal of reaching 120,000 farmers requires translation of Uganda findings
S4C – Kenya + Malawi

- Our approach
  - Cooperatives as entry points
  - Enabling trialability through Citizen Science
  - Supported through trained and supported cooperative members
  - Timed learning session along the growth cycle of Calliandra
  - Direct link to buyers / processors

- Supporting an enabling environment
- Sliding subsidies to encourage full adoption
- Incentives for nursery operators to produce seedlings and support farmers
Rural aspirations – the pilot

• The problem
  • Farm and non-farm income streams likely limit incentives and options to invest in farming
  • Profit- or yield-maximization interventions
    • likely not the mainstream among small producers

• The goal
  • Understanding medium- to long-term income portfolio aspirations
  • Customizing technologies and communication approaches to relate to differing aspirations
  • SenseMaker to elicit aspirations and drivers

Funded by:
http://worldagroforestry.org/projects1/timeline/
Exploring aspirations

How to get a better understanding of peoples’ livelihood portfolio aspirations?

• Explorations in focus groups
  • Difficult as people do not think in abstract terms
• Exploring using DCEs
  • Too complex for DCE
  • Could be used later to test if people respond to choice sets according to our assumptions on aspirational influences
• Traditional household survey
  • Trial using ‘direct questions but triangulate
  • ifpri aspiration index as complementary data

http://worldagroforestry.org/projects1/timeline/
Transforming Lives and Landscapes with Trees

Rural Aspiration
How can we measure / elicit what people want?

Exploring new options
What does the farm ↔ non-farm income split mean for technology demand – using psychology

2014

201

2016

2018

today

Using standard method while exploring
While generating **some more** qual. data, we **explored** SenseMaker

Stumbling across SenseMaker
After understanding that the problem is too complex the inaugural lecture that opened new options

Designing a pilot
Design workshop with Cognitive Edge → learning about each others context takes time

The analysis
Challenging new type of data - More details following -

[http://worldagroforestry.org/projects1/timeline/](http://worldagroforestry.org/projects1/timeline/)
Food narratives food choice motives

• The problem
  • Urban diets are more and more unhealthy
  • Food deserts in high density areas
  • Health threats not acknowledged
  • Diversified diets unpopular
  • Maize focused farming systems often less sustainable
    • Yet policy and extension focuses on Maize as a staple in East Africa

• Our approach
  • Focus on mothers
  • Known aflatoxin issue as the entry point
  • Develop health food value chains
  • Using dominant food narrative as levers of change
  • RCT as a proof of concept

Funded by:
The analysis

- Challenging new type of data
- *Between* quantitative and qualitative
- Analyzing to make it best rather than worst of both
- Framing it for publishing
- Complex adaptive systems analysis for tangible entry points

- Communicate findings in a clear enough way to reach an audience with broad range of backgrounds (our colleagues)
Purpose:
To accelerate, intensify, and evidence the translation of research and development interventions into sustainable and inclusive development impact
Thank you!

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